

**FINAL**  
**Washington State Department of Ecology**  
**Solid Waste Advisory Council Subcommittee on Electronics Waste**  
**October 7, 2005**

The Solid Waste Advisory Council (SWAC) Subcommittee on Electronic Products (E-waste) met on Friday, October 7, 2005 in Federal Way, Washington.

**SWAC Subcommittee Members Present:** Nancy Atwood, AeA; Vicki Austin, Washington Refuse and Recycling Association; Dennis Durbin, Stevens County; Jan Gee, Washington Retail Association; Tiffany Hatch, Tacoma Goodwill; Sego Jackson, Snohomish County; Craig Lorch, Total Reclaim; Mo McBroom, Washington Environmental Council; Suellen Mele, Washington Citizens for Resource Conservation; Grant Nelson, Association of Washington Businesses; Jay Shepard, Washington State Department of Ecology; Bill Smith, City of Tacoma Solid Waste; Cullen Stephenson, Washington State Department of Ecology; Frank Warnke, Advocates, Inc. Also present were members of the Agreement Dynamics facilitation team: Dee Endelman, facilitator, and Ginny Ratliff, note taker.

Attachment #A to these notes is a list of all participants, including audience members, many of whom are members of the Technical Team.

***Performance Goals Report***

After an agenda review (see Attachment #B) and group introductions, a report was made by Suellen Mele who had convened a September 29 telephone conference to discuss performance goals, i.e., how we could measure whether the program was working. Suellen reported that the group's discussion was very productive. She acknowledged those who had participated in the telephone conference call: Frank Dick, Sego Jackson, Larry King, Mo McBroom, Grant Nelson, Jay Shepard, David Stitzhal, and herself. She noted general agreement on the objective of diverting electronic materials covered in the program away from landfills and into process streams that maximize reuse and recycling.

***Waste Sorts:*** The group discussed waste sorts as a measurement tool. There was concern that the current measurement of what is going into the landfills is an imprecise, blunt measurement; is expensive to implement; and isn't an accurate baseline because so much equipment is in storage. Also, it doesn't help answer whether the playing field is level, a concern expressed by all manufacturers. The group concluded that there are a

number of indicators to look at over time, and that waste sorts could be one of several to consider.

**Consumer Survey:** The group discussed implementing a survey to assess how many units are stored in households and why, and then measure for those stored units again in 3-5 years. Surveys were also one of a number of indicators to help determine program effectiveness.

**Level Playing Field:** Manufacturers do not want to be put at an economic disadvantage relative to their competitors. Manufacturers need to know – their share of total recycling, based on a required amount that distributes responsibility fairly among the various manufacturer plans. The group had discussed that, for example, the first-year goal could be based on assumptions about the potential amount of product to be recycled based on past history and other information sources. The following years could be based on the previous year's quantities plus any additional amounts to be established by Ecology. The group also discussed a potential multi-tiered response if a manufacturer doesn't meet its obligation. At the first level, Ecology could merely require plan revisions to improve the program; at the second, penalties could be imposed; at the top tier, manufacturers could be barred from selling in the State. The group had also discussed the importance of all manufacturers participating the first year and the need for service equity throughout the state. Although these ideas were discussed, the group did not reach consensus on whether the proportionate share should be based on market share or share of waste stream.

## **Discussion of Outstanding Issues**

Dee Endelman noted to the group that the issues list (Attachment C), which Ecology had sent to them before this meeting, was based on the draft proposal they had worked on during several previous meetings. These issues appear to be the remaining unresolved ones. Jay Shepard outlined the six issues. As each of these important issues will be part of Ecology's report and recommendations to the Legislature, Jay requested that the group give input regarding whether all of the issues were covered correctly and to provide any possible solutions to the unresolved concerns. The SWAC Subcommittee, Technical Team, and audience members all participated in this discussion.

- 1) Fees – There was not consensus among stakeholders on the fee structure.
  - A number of the stakeholder groups represented supported the fee structure in the draft proposal, i.e., fees either set by a TPO or through individual or joint manufacturing plans. These fees would not be collected as an advanced-recovery fee (ARF) at point of sale. These stakeholders believe an ARF shifts a heavy burden to retailers and government. They are also concerned that an ARF results in

disincentives for manufacturers to produce better, more easily reused/recycled products. Finally, as articulated by Jan Gee, retailers believe manufacturers who wish to sell products in Washington should share responsibility in proper electronic waste transport, collection, and recycling. The stakeholder groups supporting this type of fee included the Washington Retail Association; the Washington Environmental Council; Citizens for Resource Conservation; and County and City government representatives. Some members of the American Electronics Association also support this producer responsibility financing model, while other members of the Association support the advanced recovery fee paid at retail.

- The Electronic Manufacturers' Coalition for Responsible Recycling, a group of 16 electronic product manufacturers, support a visible advanced recovery fee. The bulk of these manufacturers' sales are at the retail level, and by paying the fee at the time of purchase, consumers are educated about proper disposal, reuse, and recycling options available to them at precisely the time they will be wanting to dispose of their used equipment. They also believe that in the chain of commerce, the retail site is the most practical place to levy this fee.

SWAC Subcommittee representatives and others also made the following comments about fees:

- The Washington Environmental Council wants a program that is fully funded, workable and comprehensive.
- The American Electronics Association opposes the \$10 fee for the TPO, as currently stated in the draft proposal. They feel it's an arbitrary amount that is too high. In California, a \$10 fee has resulted in surplus funding for the system. Other manufacturers represented by Advocates Inc. recommended the legislation have a cap in the fee with flexibility between \$5-\$8/unit. Jay Shepard noted that the \$10 amount was just an estimate and could be easily changed.
- The Snohomish County representative explained that an initial fee for the TPO would be set, but that it would change over time. What is proposed is an "empowerment model" for the Board of the TPO comprised of manufacturer members who would set the fees based on the cost to operate the program.
- The Philips Electronics representative suggested a sunset rule in the fee structure because of the likely changes in recycling demand and profitability brought about by technological advances.
- He also pointed out the inconsistency between setting a fee based "a unit" when the industry standard for collection and transport is based on "weight."
- Some manufacturers expressed concern about how to equitably assess fees to customers. When it was recommended to imbed the cost in all products, one questioned, "Why should Arizona consumers

pay for a benefit received by Washington residents?”

- In response to an inquiry from a SWAC member asking what manufacturers want in a TPO, a Philips Electronics representative suggested having a first sale fee—the first seller sends what is collected to the manufacturer, who in turn sends to the TPO.

2) Performance Standards – There was not consensus among stakeholders on performance standards.

- Landfill Surcharges: The current proposal suggests that all unwanted electronic products must be captured unless the consumer pays a \$25 surcharge for disposal of each electronic product.
  - The Stevens County representative noted that the Statewide SWAC opposed surcharges—they consider it a landfill ban.
  - The Total Reclaim representative noted that many drop boxes are not staffed and a ban isn't palatable for the public.
  - The Snohomish County representative noted that 43 percent of the population in Washington are living in counties or communities with local landfill bans on electronics.
  - The Washington Refuse and Recycling Association representative noted that if the surcharge is implemented, the UTC would have to approve the charge.
- Target Recovery Rates: (See Group Report discussion at the beginning of these notes). To date, stakeholders have not been able to agree on performance standards.
  - Sego Jackson proposed an alternate model for performance standards. Under this model, all manufacturers are in a standard program, unless they have approval from Ecology to opt-out based on the following criteria: They have sold products in Washington for five years and represent at least 10 percent of the return share of electronic products. The standard program would be based on market share and manufacturers would pay a per-unit fee for each covered product sold. The system would accept products from any registered collector and retailers agree to accept responsibility for any products they sell.

After discussion of this proposal, the facilitator asked SWAC members for a show of support for this approach: 6 members indicated a favorable response; 3 were neutral; 2 were opposed.

3) Design for the environment incentives – There was not consensus among stakeholders on design for the environment to restrict hazardous waste use in

covered electronics products, particularly with respect to use of the European Union (RoHS) directive.

- The AeA representative noted that with similar European Union and Chinese laws going into affect, most manufacturers will be eliminating these substances from their computers, in any event. She noted that it might not be necessary to reference this requirement in Washington legislation, but that if it is, it should be exactly the same wording.
- The Washington Environmental Coalition representative supported consistency with European standards, but reported that the EU may be weakening their standards and that she doesn't want that to happen in Washington.
- Jeff Olsen, legislative staff, explained options to ensure that would not happen: 1) Pick a date/time in which change goes into affect; or, 2) set a standard that is consistent with the EU's but does not call out the RoHS directive.
- The Panasonic representative noted that if Washington chooses a standard different than the EU's, -Panasonic would not be able to sell TVs in Washington.
- Other manufacturers voiced concern about state law including international standards.

- 4) Service Level - There was not consensus among stakeholders on the level of service to provide in the legislation, although all agreed that there should be service throughout the State, taking into account rural versus urban needs.
- Ecology has received input that SWAC Subcommittee members are concerned about the high ratio of one location per 11,400 residents and the required frequency of operational sites, particularly in rural areas.
  - The Washington Refuse and Recycling representative noted that recycling is new to many rural areas and it will take time to alter consumer behavior, particularly in Eastern Washington. She felt it was too early to dictate level of service and hours for collection sites. She recommended wording that would create collection sites, "...At least as available as the existing recycling services in that area."
  - The HP Representative recommended that Ecology set the goal of the number of units to be recycled, but allow manufacturers to set the number of locations to meet that goal.
  - In response to a proposed 500 collection locations in Washington proposed by Ecology, the Washington Citizens for Recycling representative suggested keeping this goal but phasing it in over time. She also suggested manufacturers offering free mail-back programs for rural-area consumers.
  - The Snohomish County representative recommended a ramped-up goal of every rural county having at least one collection site, with no penalties for the first two years but ultimately requiring one site for every town of 10,000 people.

- 5) Facility standards - There was not consensus among stakeholders on facility operating standards for collection, transporting and processing of electronic products.
- The representative for Washington Citizens for Resource Conservation stated that her organization doesn't believe that the current regulatory environment in Washington provides adequate protection, particularly regarding exports to non-OECD countries. She also noted that requirements in this regard had been pulled out of the initial study bill.
  - With respect to health and safety standards for recycling, the Total Reclaim representative noted that some electronic products contain materials that are hazardous (e.g., lead) and have to be handled according to hazardous waste laws.
  - With respect to the proposal's reference to restricting export, the Washington Refuse and Recycling Association representative commented that export issues are national policy matters and not under the purview of this group.
  - The Sharp Electronics representative said they have little control over products once they leave the state and expressed his opinion that the courts would likely overturn any interstate standards on collection, transporting and processing of electronic products.
  - The Panasonic representative stated that, if manufacturers are being required to recycle, they should be allowed to do so wherever they wish. He stated that many manufacturers are building state-of-the-art recycling facilities in China, for example.
  - The Washington Environmental Council representative suggested making incentives for processing these products in Washington State.
- 6) Establishing level of responsibility among manufacturers - There was not consensus among stakeholders on how to determine the amount of electronic products that should be recovered by each manufacturer's program.
- The Sharp Electronics representative noted that return share gives an unfair advantage to new manufacturers and could result in penalizing established manufacturers, especially if their return shares are higher than their market share.
  - The group discussed the lack of consistent data on market share for each manufacturer in the state. The Sharp Electronics representative suggested that the retailers might collect and report that data.
  - The Hewlett-Packard representative recommended return share because, with this method, manufacturers are paying for the problem as it is created. This approach also provides an incentive for manufacturers to build longer-lasting products. He opined that under a market-share approach manufacturers can best reach their recycling goals by creating products with shorter lives. He said that H-P would support a bifurcated system – separating computers and televisions.

- The Association of Washington Business representative suggested using a market-share approach for televisions and a return share for computers, as a possible solution.
- The Sony representative noted that point-of-sale advance recovery fees eliminated this problem, and that it would be nearly impossible to have a bifurcated system for televisions and computers.

The facilitator asked the group if there were other major issues not addressed in the proposal or other areas of disagreement. Comments included:

- The AeA representative cautioned Ecology to consider the bureaucratic expense for manufacturers, collectors, and recyclers with both registration and licensing. She noted the more expensive the system is the less successful it will be.
- In response to a discussion of whether various stakeholders had provided data to enable the group to reach conclusions, the Advocates Inc. representative stated that he doesn't want Ecology's report to reflect that the group failed to reach consensus because manufacturers wouldn't submit sales data; they have submitted that data. (Note: Ecology does not have sales data on market share for televisions. Requests for such data from manufacturers have not been filled).

The facilitator explained that she would be writing a process report and this report would document the good level of collaborative effort on the parts of all stakeholders.

### **Preliminary Draft Report to the Legislature**

Next, the facilitator asked the group if there were any issues missing in the draft "cut and paste" report developed by Ecology (Attachment #D). She noted that Ecology had called this report *very preliminary*, not even wanting to call it a Draft, but a "cut and paste". Comments included:

- Issue #8, on landfills, was not thoroughly discussed by the SWAC Subcommittee and the Washington Refuse and Recycling Association will submit input on this section.
- Issue #12, there is not much information related to schools and charities and the data is readily available.
- Overall, AeA encouraged a more fact-based report backed with available data.
- On Issue #8, quantify the amount of energy savings from recycling; possible sources are EPA and NGIT study for green house credits.
- The Washington Refuse and Recycling Association representative recommended that the proposal developed by the SWAC Subcommittee be sent to the Legislature, not the cut and paste report. She cited portions of Issue #8 (suitability of lined landfills) as an example of areas not discussed by the SWAC and not reflective of the group's deliberations.

- The Washington Environmental Council representative recommended working with Ecology to ensure the cut and paste report reflect all of the opinions expressed, given there is a lack of consensus on some issues.
- The AWB representative recommended that it be sent back to the SWAC Subcommittee for review prior to submission to the Legislature.

Jay Shepard said that he would be in the process of revising the report and had taken many notes during the discussion today. Stakeholders can continue to provide Jay comments, provided, however, that he plans to have the report finalized before Thanksgiving and so needs the comments soon.

**Conclusion:** After thanking all SWAC Subcommittee, Technical Team, and audience members for their hard work and dedication to the process, the meeting adjourned at 3:00 p.m.



Attachment A  
Participants in 10-7-05 E-Waste Meeting

Vicki Austin  
Frank Dick  
Kim Ducote  
Dennis Durbin  
Dee Endelman  
Ric Erdheim  
Lori Evans  
Art Fitcher  
Jan Gee  
Dave Godlewski  
Tiffany Hatch  
Kim Hoff  
Sego Jackson  
Larry King  
Craig Lorch  
Frank Marella  
Mo McBroom  
Suellen Mele  
Grant Nelson  
Jeff Olsen  
Ginny Ratliff  
Jay Shepard  
Bill Smith  
Doug Smith  
Rita Smith  
Cullen Stephenson  
Jay Sternoff  
David Stitzhal  
Dale Swanson  
David Thompson  
Ha Tran  
Frank Warnke  
Phil Watkins

ATTACHMENT #B

**Agenda**  
**Washington State Department of Ecology**  
**Electronic Product Recycling and Reuse Project**  
**Meeting # 6: October 7, 2005**

**Dumas Bay Centre, 3200 SW Dash Point Rd., Federal Way, WA**

**Overall Project Goal:**

Develop recommendations for implementing and financing an electronic product collection, recycling, and reuse program for Washington State.

Meeting Purpose: To discuss issues of disagreement and understand points of view

Desired Outcomes:

- Record of the group's comments related to issues of disagreement
- Acknowledge the sub-committee's hard work
- Process closure

<b>Time</b>	<b>Topic</b>
8:30 a.m.	Informal Gathering Time—coffee and light refreshments available
9:00 a.m.	Welcome, Introductions and Agenda Review
9:10 a.m.	Report from Performance Group Task Force <ul style="list-style-type: none"><li>○ Report of discussions</li><li>○ Q &amp; A</li></ul>
9:45 a.m.	Discuss issues <ul style="list-style-type: none"><li>• Present the issue as currently understood</li><li>• Clarify understanding</li><li>• Receive additional comments or suggestions for resolution</li><li>• Summarize of areas of agreement/disagreement</li></ul>
10:30 a.m.	Break
10:40 a.m.	Review (continued)
Noon	Lunch
12:45 p.m.	Discuss final report cut and paste <ul style="list-style-type: none"><li>• Identify missing issues</li><li>• Discuss need for additional information or clarity</li></ul>
2:00 p.m.	Break
2:10 p.m.	Thanks and Closure
3:00 p.m.	Adjourn

ATTACHMENT #C  
Washington State Department of Ecology  
SWAC E-Waste Subcommittee  
Issues for Discussion  
October 2005

**1. Fees – advanced recovery fee, first possession fee or producer responsibility.**

The current draft provides two approaches for manufacturers:

- a. Participate in a standard program operated by a third party, quasi-governmental organization (TPO).
- b. Write an independent plan, individually or collaboratively with other manufacturers

The initial funding for the standard program states that participating manufacturers provide through a fee, \$10 per unit sold into the state of Washington. After a few years, the TPO sets the rate of payment annually based on actual program costs. Overpayments are credited to the next years costs, under payments are billed. Member manufacturers of the TPO can negotiate among themselves the basis for distributing payments among one another; they can create the amount based on program costs and control costs by finding efficiencies in the system in cooperation with the TPO management.

Independent planners internalize the cost of the program and pay for it through any means they deem appropriate within their own ability.

A point of sale advance recovery fee is not considered feasible in the state at this point in time.

**2. Performance Standards – setting a target recovery rate, a goal or required participation by consumers**

The current proposal established the intent of the legislature, which is to capture all unwanted electronic products available within the programs set up by manufacturers. An incentive to consumers to participate in the recycling program is provided by means of a \$25 surcharge placed on each electronic product disposed. The surcharge is in addition to the cost of collection and disposal.

This approach assumes that consumers, given the choice between a free recycling program or costly disposal, will opt for the free, no-cost option.

Alternatively, we have discussed establishing a target recovery rate that each manufacturer would have to meet. Penalties would be assessed based on the level of failure to meet the target rate. If the failure was significant, the manufacturer would lose the privilege to sell their product into the state.

Goals are generally perceived as a desired but probably unattainable outcome with no associated incentive to meet the goal. Therefore, they have not been considered in discussions.

### **3. Design for the environment Incentives – restriction on hazardous substance use**

The intent of the current proposal is to adopt language similar to the European Union directive on restriction of hazardous substance use in electronic products (RoHS). The rationale relates to the fact that the manufacturers will be complying with this directive and the desire to minimize sales of product that may contain these materials into Washington state when RoHS takes effect.

### **4. Service level**

The current proposal is set at one location to drop off electronic products per 11,400 population. The location can be at an existing facility such as a solid waste transfer station or a retail store. Equivalency opportunities are provided.

### **5. Facility standards**

There has been much discussion about establishing facility operating standards for collection, transporting and processing of electronic products. There is sentiment that the existing regulatory framework provide adequate protection of human health and the environment. Also, that contracts between service providers and manufacturers will provide a non-governmental form of enforcement through enforcement of contract provisions.

The existing proposal attempts to address the use of prison labor and export issues within the state's authority.

### **6. Establishing level of responsibility among manufacturers – what is the basis?**

The arguments offered on this issue revolve around how to determine the amount of electronic products that should be recovered by each manufacturers program.

One option that has some support is to base the level of responsibility on the current market share of electronic products being sold into the state. This approach assures that financing is available to cover the cost of the program from manufacturers that are in business today. Many manufacturers no longer hold a market share or are completely out of business. By assessing those that are in business today based on current market share, the issue of who pays for orphan and historic products becomes a moot point.

The other option is to base the level of responsibility on return share; that amount of product returned for recycling that is branded by each manufacturer would be their level of responsibility. Orphan and historic products with no current manufacturer would be distributed among the active manufacturers based on their percentage of

identifiable return share. This approach requires those manufacturers that held strong market share in the past, but have a lower portion now, to take responsibility for their old products. When products currently sold are recycled in the future, the responsibility would be more reflective of the sales of the past.

There are strong arguments for both approaches. In the big picture, we need to consider that some of these products may not be manufactured in the future, replaced by new technology that might be manufactured by a yet to be created company. What are the consequences of using either of these approaches in the future? There is a high likelihood that the electronic product marketplace will change and shift. Technology in this area changes everyday. How can we set up a system that can prepare for this inevitably dynamic future?

ATTACHMENT #D

**See Ecology's Extended Producer Responsibility  
Consumer Electronic Products  
(A separately-attached document)**